

ABSTRACT OF THE DISCLOSURE

A phase change type information storage medium is provided,
5 which achieves high-speed recording/reproduction. A DVD-RW disc
having a substrate formed with grooves, lands, and land pre-pits,
on which are laminated a first dielectric layer, a phase-change
recording layer, a second dielectric layer, a reflective layer,
and an overcoat layer. The disc is rotated at a 3.49-7.0 m/sec linear
10 speed while being irradiated with a laser beam of 600-700 nm wavelength
focused by an objective lens of 0.55-0.7 numerical aperture to the
phase-change recording layer from the substrate side. The
phase-change recording layer is made of a Ge-In-Sb-Te material,
and the reflective layer is made of an Ag-Nd-Cu material. The first
15 dielectric layer has a 65-85 nm thickness, the phase-change recording
layer has a 10-20 nm thickness, the second dielectric layer has
a 13-23 nm thickness, and the reflective layer has a 100-225 nm
thickness. The grooves have a 200-350 nm width and 25-50 nm depth,
and the land pre-pits have a depth of plus-minus 3 nm relative to
20 the groove depth.